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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/675,860	09/29/2000	MARTIN M. BARRERA	NOVE10001000	9366

22891 7590 08/12/2002

DELIO & PETERSON
121 WHITNEY AVENUE
NEW HAVEN, CT 06510

EXAMINER

KIM, CHRISTOPHER S

ART UNIT	PAPER NUMBER
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3752

DATE MAILED: 08/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/675,860

Applicant(s)

BARRERA ET AL.

Examiner

Christopher S. Kim

Art Unit

3752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 13 June 2002 is: a) ☐ approved b) ☒ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Amendment filed June 13, 2002 is acknowledged.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Drawings

3. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on June 13, 2002 have been disapproved because they introduce new matter into the drawings. 37 CFR 1.121(a)(6) states that no amendment may introduce new matter into the disclosure of an application. The original disclosure does not support the showing of the apparatus surrounded by a heater and an optional heater as proposed in figure 2. Newly presented figure 6 is not fully supported by the disclosure, as originally filed. For example, a constant cross section channel down stream of the throat is not disclosed.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "heater" recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The disclosure is objected to because of the following informalities: reference to figure 6 which is not in the application.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. Claims 1-21 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 1 recites "at least one aperture" in line 10 and "at least one chemical vapor deposition fluid" in line 11. Claim 13 recites "at least one aperture" in line 10 and "at least one of said plurality of chemical vapor deposition fluids" in lines 11-12. The disclosure does not enable an embodiment having one aperture and a plurality of fluids.

7. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites the limitation "said chemical vapor deposition fluid" in line 8.

There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the mixing" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "at least one chemical vapor deposition fluid" in line 11. This appears to be a double inclusion of the "plurality of chemical vapor deposition fluids" recited in lines 1-2.

Claim 1 recites the limitation "third temperature" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "atomized chemical vapor deposition fluids and chemical vapor deposition gases" in line 16. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "a chemical vapor deposition processing chamber" in line 18. This appears to be a double inclusion of the "chemical vapor deposition chamber" recited in line 2.

Claim 1 recites the limitation "chemical vapor deposition gases" in line 16. This appears to be a double inclusion of the "chemical vapor deposition carrier fluid" recited in lines 3-4.

Claim 6 recites "said throat region further comprises two or more apertures". Is this in addition to the "at least one aperture" recited in claim 1? It is uncertain how many apertures are being claimed.

Claim 8 recites the limitation "chemical vapor deposition fluids" in line 3. This appears to be a double inclusion of the "chemical vapor deposition fluids" recited in claim 1, lines 1-2.

Claim 13 recites the limitation "said chemical vapor deposition fluid" in line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "the mixing" in line 11. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "a chemical vapor deposition processing chamber" in lines 17-18. This appears to be a double inclusion of the "chemical vapor deposition chamber" recited in line 2.

Claim 18 recites "said throat region further comprises two or more apertures". Is this in addition to the "at least one aperture" recited in claim 13? It is uncertain how many apertures are being claimed.

Claim 19 recites the limitation "chemical vapor deposition fluids" in line 3. This appears to be a double inclusion of the "chemical vapor deposition fluids" recited in claim 13, lines 1-2.

Claim Rejections - 35 USC § 102

1. Claims 1, 3-10, 13, 15-21 (as best understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Gwyn (4,397,422).

Gwyn discloses an apparatus comprising: an inlet 17; a throat region 19; at least one aperture 20; an exit nozzle 15.

Claim Rejections - 35 USC § 103

2. Claims 2, 11, 12, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gwyn (4,397,422).

With respect to claims 2 and 14, Gwyn discloses the limitations of the claimed invention with the exception of the angle being forty to sixty degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided an angle of forty to sixty degrees for optimization dependent of application criteria, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

With respect to claim 11, applicant discloses a heater as prior art. It would have been obvious to a person having ordinary skill in the art at the time of the invention to have provided a heater to the device of Gwyn to heat the paint exiting the exit nozzle.

With respect to claim 12, Gwyn discloses the limitations of the claimed invention with the exception of the angle being twenty to forty degrees. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided an angle of twenty to forty degrees for optimization dependent of application criteria, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

Response to Arguments

8. Applicant's arguments filed June 13, 2002 have been fully considered but they are not persuasive.

In response to applicant's arguments directed to the rejection under 35 U.S.C. 112, first paragraph, the disclosure does not enable an embodiment having a combination of one aperture and a plurality of fluids.

In response to applicant's argument directed to the rejection of claims 6 and 18 under 35 U.S.C. 112, second paragraph, as indicated by the applicant, the possibility of two scenarios is further evidence that the claims are indefinite. It is uncertain how many apertures are being claimed.

In response to applicant's argument that Gwyn does not disclose an apparatus to chemical deposition processing, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Additionally, it has been held that the recitation that an element is "adaped to" perform a function is not a positive limitation but only required the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

In response to applicant's argument that "said exit nozzle is an extension of said throat region having the same dimensions as said throat region", the exit nozzle 15 of Gwyn is an extension of the throat region 19. The exit nozzle 15 has the same dimensions (diameter) as the throat region 19 where the two connect.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher S. Kim whose telephone number is (703) 308-8336. The examiner can normally be reached on Monday - Thursday, 6:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry C. Yuen can be reached on (703) 308-1946. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7766 for regular communications and (703) 308-7766 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

A handwritten signature in black ink, appearing to read 'CK', followed by a long horizontal line extending to the right.

Christopher S. Kim
Examiner
Art Unit 3752

CK
August 12, 2002